Journal of Biomedical Materials Research (Applied Biomaterials) Author Index to Volume 53

Abboud, M.
—; Casaubieilh, L.; Morvan, F.; Fontanille, M.; Duguet, E.: PMMA-Based Composite Materials with Reactive Ceramic Fillers: IV. Radiopacifying Particles Embedded in PMMA Beads for Acrylic Bone Cements, 728
Affatato, S.
—; Frigo, M.; Toni, A.: An *In Vitro* Investigation of Diamond-Like Carbon as a Femoral Head Coating, 221
Agrawal, C. M. See Wang, X., 664
Aitasalo, K. M. J. See Peltola, M. J., 161
Al Hertani, W.
—; Waddell, J. P.; Anderson, G. I.: The Effect of Partial vs. Full Hydroxyapatite Coating on Periprosthetic Bone Quality Around the Canine Madreporic Femoral Stem, 518
Amadio, P. C. See Momose, T., 806
An, K.-N. See Momose, T., 806
An, Y. H. See McKoy, B. E., 216
Anderson, G. I. See Al Hertani, W., 518
Anderson, J. M. See Nakayama, Y., 584
Anderson, P. L. See Szivek, J. A., 211
Andersson, Ö. H. See Peltola, M. J., 161
Andriano, K. P.
—; Chandrashekar, B.; McEnery, K.; Dunn, R. L.; Moyer, K.; Balliu, C. M.; Holland, K. M.; Garrett, S.; Huffer, W. E.: Preliminary *In Vivo* Studies on the Osteogenic Potential of Bone Morphogenetic Proteins Delivered from an Absorbable Puttylike Polymer Matrix, 36
Antonucci, J. M. See Skrtic, D., 381
Arola, D. D.
—; McCain, M. L.: Abrasive Waterjet Peening: A New Method of Surface Preparation for Metal Orthopedic Implants, 536
Aronsson, G.
—; Dahlgren, U. I.; Karlsson, S.: Human and Rat Mononuclear Cell Proliferation Show Different Sensitivity, *In Vitro*, to Single Constituents of Dental Composite Resins, 651
Ash, H. E. See Smith, S. L., 710
Aspenberg, P. See Goodman, S., 475

Bailey, H. O. See Shanbhag, A. S., 100
Baillod, P. See Bolliger-Stucki, B., 577
Balliu, C. M. See Andriano, K. P., 36
Baltag, I.
—; Watanabe, K.; Kusakari, H.; Taguchi, N.; Miyakawa, O.; Kobayashi, M.; Ito, N.: Long-Term Changes of Hydroxyapatite-Coated Dental Implants, 76
Baran, G. See Yarovoy, Y. K., 152
Battraw, A. G. See Szivek, J. A., 211
Bauer, T. W. See Mochida, Y., 193
Bearinger, J. P. See Park, S., 568
Becchetti, E. See Locci, P., 560
Belcastro, S. See Locci, P., 560
Bellocchio, S. See Locci, P., 560
Belser, U. C. See Scherrer, S. S., 362
Benevenia, J.
—; Zimmerman, M.; Keating, J.; Cyran, F.; Blacksin, M.; Parsons, J. R.: Mechanical Environment Affects Allograft Incorporation, 67
Bertrand, M.-F.
—; Leforestier, E.; Muller, M.; Lupi-Pégurier, L.; Bolla, M.: Effect of Surface Penetrating Sealant on Surface Texture and Microhardness of Composite Resins, 658
Biasibetti, A. See Massè, A., 600
Blacksin, M. See Benevenia, J., 67
Bloebaum, R. D. See Willie, B. M., 137
Bluhm, A. See Honl, M., 781
Bolla, M. See Bertrand, M.-F., 658
Bolliger-Stucki, B.
—; Baillod, P.; Mäder, W.; Furlan, M.: Biochemical Properties of the Fibrinogen Component of a Fibrin Glue Before and After Severe Dry Heat Treatment, 577
Bonfield, W. See Harper, E. J., 605
Bosetti, M. See Massè, A., 600
Botsis, J. See Scherrer, S. S., 362
Bottoni, C. See Campbell, A. A., 400
Brandt, C. See Honl, M., 781
Brooks, D. E. See Campbell, A. A., 400
Brouwer, L. A. See van Wachem, P. B., 18
Brovarone, C. V. See Verné, E., 408
Brown, P. W. See Greish, Y. E., 421
Brown, S. A. See Merritt, K., 131
Bruno, A. See Massè, A., 600
Bryers, J. D. See Klueh, U., 621

Cahalan, P. T. See van Wachem, P. B., 18
Caldarise, S. See Curodeau, A., 525
Calvitti, M. See Locci, P., 560
Campbell, A. A.
—; Song, L.; Li, X. S.; Nelson, B. J.; Bottoni, C.; Brooks, D. E.; DeJong, E. S.: Development, Characterization, and Anti-Microbial Efficacy of Hydroxyapatite-Chlorhexidine Coatings Produced by Surface-Induced Mineralization, 400
Cannas, M. See Massè, A., 600
Carlson, T. J. See Winkler, M. M., 554
Casaubieilh, L. See Abboud, M., 728
Case, J. A.
—; Tucker, R. D.; Park, J. B.: Defining the Heating Characteristics of Ferromagnetic Implants Using Calorimetry, 791
Castaño, V. See Coreño, J., 44
Castner, D. G. See Park, S., 568
Cha, C. W. See Shanbhag, A. S., 100
Chandrashekar, B. See Andriano, K. P., 36
Chapekar, M. S.
—; Tissue Engineering: Challenges and Opportunities, 617
Chatelier, R. C. See Griesser, H. J., 235
Chellat, F.
—; Tabrizian, M.; Dumitriu, S.; Chornet, E.; Rivard, C.-H.; Yahia, L.: Study of Biodegradation Behavior of Chitosan–Xanthan Microspheres in Simulated Physiological Media, 592
Chen, H. Y. See Manhart, J., 353
Chen, J. See Winkler, M. M., 554
Choi, J. S. See Zamora, P. O., 244
Choju, K. See Shinzato, S., 51
Chornet, E. See Chellat, F., 592
Chow, L. C.
—; Hirayama, S.; Takagi, S.; Parry, E.: Diametral Tensile Strength and Compressive Strength of a Calcium Phosphate Cement: Effect of Applied Pressure, 511
Chu, C.-C. See Kim, S.-h., 258
Chun, L. See Goodman, S., 475
Coleman, N. J. See De Diego, M. A., 199
Collier, J. P. See Currier, B. H., 143
Coreño, J.
—; Rivera, E.; Castaño, V.; Rodríguez, R.: Apatite Growth on Calcium Adsorbed Surface of Wet Flocculated Silica Particles Immersed in a Modified Simulated Body Fluid, 44
Curodeau, A.
—; Sachs, E.; Caldarise, S.: Design and Fabrication of Cast Orthopedic Implants with Freeform Surface Textures from 3-D Printed Ceramic Shell, 525
Currier, B. H.
—; Currier, J. H.; Collier, J. P.; Mayor, M. B.: Effect of Fabrication Method and Resin Type on Performance of Tibial Bearings, 143
Currier, J. H. See Currier, B. H., 143
Cyran, F. See Benevenia, J., 67

Journal of Biomedical Materials Research (Applied Biomaterials) Author Index to Volume 53

Abboud, M.
—; Casaubieilh, L.; Morvan, F.; Fontanille, M.; Duguet, E.: PMMA-Based Composite Materials with Reactive Ceramic Fillers: IV. Radiopacifying Particles Embedded in PMMA Beads for Acrylic Bone Cements, 728
Affatato, S.
—; Frigo, M.; Toni, A.: An *In Vitro* Investigation of Diamond-Like Carbon as a Femoral Head Coating, 221
Agrawal, C. M. See Wang, X., 664
Aitasalo, K. M. J. See Peltola, M. J., 161
Al Hertani, W.
—; Waddell, J. P.; Anderson, G. I.: The Effect of Partial vs. Full Hydroxyapatite Coating on Periprosthetic Bone Quality Around the Canine Madreporic Femoral Stem, 518
Amadio, P. C. See Momose, T., 806
An, K.-N. See Momose, T., 806
An, Y. H. See McKoy, B. E., 216
Anderson, G. I. See Al Hertani, W., 518
Anderson, J. M. See Nakayama, Y., 584
Anderson, P. L. See Szivek, J. A., 211
Andersson, Ö. H. See Peltola, M. J., 161
Andriano, K. P.
—; Chandrashekar, B.; McEnery, K.; Dunn, R. L.; Moyer, K.; Balliu, C. M.; Holland, K. M.; Garrett, S.; Huffer, W. E.: Preliminary *In Vivo* Studies on the Osteogenic Potential of Bone Morphogenetic Proteins Delivered from an Absorbable Puttylike Polymer Matrix, 36
Antonucci, J. M. See Skrtic, D., 381
Arola, D. D.
—; McCain, M. L.: Abrasive Waterjet Peening: A New Method of Surface Preparation for Metal Orthopedic Implants, 536
Aronsson, G.
—; Dahlgren, U. I.; Karlsson, S.: Human and Rat Mononuclear Cell Proliferation Show Different Sensitivity, *In Vitro*, to Single Constituents of Dental Composite Resins, 651
Ash, H. E. See Smith, S. L., 710
Aspenberg, P. See Goodman, S., 475

Bailey, H. O. See Shanbhag, A. S., 100
Baillod, P. See Bolliger-Stucki, B., 577
Balliu, C. M. See Andriano, K. P., 36
Baltag, I.
—; Watanabe, K.; Kusakari, H.; Taguchi, N.; Miyakawa, O.; Kobayashi, M.; Ito, N.: Long-Term Changes of Hydroxyapatite-Coated Dental Implants, 76
Baran, G. See Yarovoy, Y. K., 152
Battraw, A. G. See Szivek, J. A., 211
Bauer, T. W. See Mochida, Y., 193
Bearinger, J. P. See Park, S., 568
Becchetti, E. See Locci, P., 560
Belcastro, S. See Locci, P., 560
Bellocchio, S. See Locci, P., 560
Belser, U. C. See Scherrer, S. S., 362
Benevenia, J.
—; Zimmerman, M.; Keating, J.; Cyran, F.; Blacksin, M.; Parsons, J. R.: Mechanical Environment Affects Allograft Incorporation, 67
Bertrand, M.-F.
—; Leforestier, E.; Muller, M.; Lupi-Pégurier, L.; Bolla, M.: Effect of Surface Penetrating Sealant on Surface Texture and Microhardness of Composite Resins, 658
Biasibetti, A. See Massè, A., 600
Blacksin, M. See Benevenia, J., 67
Bloebaum, R. D. See Willie, B. M., 137
Bluhm, A. See Honl, M., 781
Bolla, M. See Bertrand, M.-F., 658
Bolliger-Stucki, B.
—; Baillod, P.; Mäder, W.; Furlan, M.: Biochemical Properties of the Fibrinogen Component of a Fibrin Glue Before and After Severe Dry Heat Treatment, 577
Bonfield, W. See Harper, E. J., 605
Bosetti, M. See Massè, A., 600
Botsis, J. See Scherrer, S. S., 362
Bottoni, C. See Campbell, A. A., 400
Brandt, C. See Honl, M., 781
Brooks, D. E. See Campbell, A. A., 400
Brouwer, L. A. See van Wachem, P. B., 18
Brovarone, C. V. See Verné, E., 408
Brown, P. W. See Greish, Y. E., 421
Brown, S. A. See Merritt, K., 131
Bruno, A. See Massè, A., 600
Bryers, J. D. See Klueh, U., 621

Cahalan, P. T. See van Wachem, P. B., 18
Caldarise, S. See Curodeau, A., 525
Calvitti, M. See Locci, P., 560
Campbell, A. A.
—; Song, L.; Li, X. S.; Nelson, B. J.; Bottoni, C.; Brooks, D. E.; DeJong, E. S.: Development, Characterization, and Anti-Microbial Efficacy of Hydroxyapatite-Chlorhexidine Coatings Produced by Surface-Induced Mineralization, 400
Cannas, M. See Massè, A., 600
Carlson, T. J. See Winkler, M. M., 554
Casaubieilh, L. See Abboud, M., 728
Case, J. A.
—; Tucker, R. D.; Park, J. B.: Defining the Heating Characteristics of Ferromagnetic Implants Using Calorimetry, 791
Castaño, V. See Coreño, J., 44
Castner, D. G. See Park, S., 568
Cha, C. W. See Shanbhag, A. S., 100
Chandrashekar, B. See Andriano, K. P., 36
Chapekar, M. S.
—; Tissue Engineering: Challenges and Opportunities, 617
Chatelier, R. C. See Griesser, H. J., 235
Chellat, F.
—; Tabrizian, M.; Dumitriu, S.; Chornet, E.; Rivard, C.-H.; Yahia, L.: Study of Biodegradation Behavior of Chitosan–Xanthan Microspheres in Simulated Physiological Media, 592
Chen, H. Y. See Manhart, J., 353
Chen, J. See Winkler, M. M., 554
Choi, J. S. See Zamora, P. O., 244
Choju, K. See Shinzato, S., 51
Chornet, E. See Chellat, F., 592
Chow, L. C.
—; Hirayama, S.; Takagi, S.; Parry, E.: Diametral Tensile Strength and Compressive Strength of a Calcium Phosphate Cement: Effect of Applied Pressure, 511
Chu, C.-C. See Kim, S.-h., 258
Chun, L. See Goodman, S., 475
Coleman, N. J. See De Diego, M. A., 199
Collier, J. P. See Currier, B. H., 143
Coreño, J.
—; Rivera, E.; Castaño, V.; Rodríguez, R.: Apatite Growth on Calcium Adsorbed Surface of Wet Flocculated Silica Particles Immersed in a Modified Simulated Body Fluid, 44
Curodeau, A.
—; Sachs, E.; Caldarise, S.: Design and Fabrication of Cast Orthopedic Implants with Freeform Surface Textures from 3-D Printed Ceramic Shell, 525
Currier, B. H.
—; Currier, J. H.; Collier, J. P.; Mayor, M. B.: Effect of Fabrication Method and Resin Type on Performance of Tibial Bearings, 143
Currier, J. H. See Currier, B. H., 143
Cyran, F. See Benevenia, J., 67

Dahlgren, U. I. See Aronsson, G., 651
De Diego, M. A.
—; Coleman, N. J.; Hench, L. L.: Tensile Properties of Bioactive Fibers for Tissue Engineering Applications, 199
DeJong, E. S. See Campbell, A. A., 400
DeLustro, F. See Prior, J. J., 252
Denry, I. L.
—; Holloway, J. A.: Effect of Magnesium Content on the Microstructure and Crystalline Phases of Fluoramphibole Glass-Ceramics, 289
Desai, T. A. See Deutsch, J., 267
Deutsch, J.
—; Motlagh, D.; Russell, B.; Desai, T. A.: Fabrication of Microtextured Membranes for Cardiac Myocyte Attachment and Orientation, 267
Dijkstra, P. J. See van Wachem, P. B., 18
Dorairaj, N. R. See Mukherjee, D. P., 467
Duda, G. N.
—; Haisch, A.; Endres, M.; Gebert, C.; Schroeder, D.; Hoffmann, J. E.; Sittinger, M.: Mechanical Quality of Tissue Engineered Cartilage: Results after 6 and 12 Weeks *In Vivo*, 673
Duguet, E. See Abboud, M., 728
Dumitriu, S. See Chellat, F., 592
Dunn, R. L. See Andriano, K. P., 36

Eanes, E. D. See Skrtic, D., 381
Eckel, H. E. See Sittel, C., 646
Eichmiller, F. C. See Skrtic, D., 381
Endres, M. See Duda, G. N., 673
Engelke, C. See Schneider, H., 86
Erler, G. See Schneider, H., 86
Eror, N. G. See Shanbhag, A. S., 100

Feijen, J. See van Wachem, P. B., 18
Ferretti, J. A. See Zamora, P. O., 244
Fisher, J. See Green, T. R., 490
Fontanille, M. See Abboud, M., 728
Frank, M. See Höland, W., 297
Frigo, M. See Affatato, S., 221
Fröhlich, M. See Merte, K., 93
—; See Schneider, H., 86
Fujitani, M. See Shirai, K., 204
Funduk, N. See Kosmač, T., 304
Furlan, M. See Bolliger-Stucki, B., 577

Gallinaro, P. See Massè, A., 600
Garrett, S. See Andriano, K. P., 36
Gebert, C. See Duda, G. N., 673
Gengenbach, T. R. See Griesser, H. J., 235
Gerritsen, M.
—; Lutterman, J. A.; Jansen, J. A.: Wound Healing Around Bone-Anchored Percutaneous Devices in Experimental Diabetes Mellitus, 702
Geurtsen, W. See Theilig, C., 632
Glancy, T. See Goodman, S., 475
Goodman, S.
—; Song, Y.; Chun, L.; Aspenberg, P.; Plouhar, P.; Glancy, T.; Regula, D.; Smith, R. L.: Effects of Local Infusion of TGFβ on Bone Ingrowth in Rabbit Chambers, 475
Graßmann, O.
—; Heimann, R. B.: Compositional and Microstructural Changes of Engineered Plasma-Sprayed Hydroxyapatite Coatings on Ti6Al4V Substrates during Incubation in Protein-Free Simulated Body Fluid, 685
Graham, D. See Mukherjee, D. P., 467
Green, T. R.
—; Fisher, J.; Matthews, J. B.; Stone, M. H.; Ingham, E.: Effect of Size and Dose on Bone Resorption Activity of Macrophages by *In Vitro* Clinically Relevant Ultra High Molecular Weight Polyethylene Particles, 490
Greenspan, D. C. See Zhong, J., 694
Greish, Y. E.
—; Brown, P. W.: An Evaluation of Mechanical Property and Microstructural Development in HAP-Ca Polycarboxylate Biocomposites Prepared by Hot Pressing, 421
Griesser, H. J.
—; Chatelier, R. C.; Martin, C.; Vasic, Z. R.; Gengenbach, T. R.; Jessup, G.: Elimination of Stick-Slip of Elastomeric Sutures by Radiofrequency Glow Discharge Deposited Coatings, 235
Griss, P. See Roessler, M., 167
Gruber, A. D.
—; Widenhouse, C. W.; Mathes, S.; Gruber, R. P.: Exhaustive Soxhlet Extraction for the Complete Removal of Residual Compounds to Provide a Nonleaching Silicone Elastomer, 445
Gruber, R. P. See Gruber, A. D., 445
Guerra, M. See Locci, P., 560
Guizzardi, S.
—; Montanari, C.; Migliaccio, S.; Strocchi, R.; Solmi, R.; Martini, D.; Ruggeri, A.: Qualitative Assessment of Natural Apatite *In Vitro* and *In Vivo*, 227

Häfer, M. See Merte, K., 93
Hahn, L. See Weigl, P., 320
Haisch, A. See Duda, G. N., 673
Hallab, N. J.
—; Mikecz, K.; Jacobs, J. J.: A Triple Assay Technique for the Evaluation of Metal-Induced, Delayed-Type Hypersensitivity Responses in Patients with or Receiving Total Joint Arthroplasty, 480
Hamula, D. W. See Winkler, M. M., 554
Han, J.-S. See Kim, D.-J., 314, 438
Harper, E. J.
—; Bonfield, W.: Tensile Characteristics of Ten Commercial Acrylic Bone Cements, 605
Healy, K. E. See Park, S., 568
Heimann, R. B. See Graßmann, O., 685
Hench, L. L. See De Diego, M. A., 199
Hendriks, M. See van Wachem, P. B., 18
Hickel, R. See Manhart, J., 353
Hille, E. See Honl, M., 781
Hino, K. See Kawagoe, K., 678
Hirayama, S. See Chow, L. C., 511
Hirsch, E. See Merte, K., 93
Hitchins, V. M. See Merritt, K., 131
Hoepffner, H.-J. See Schlegel, K. A., 392
Hoffmann, J. E. See Duda, G. N., 673
Hofmann, A. A. See Willie, B. M., 137
Höland, W.
—; Schweiger, M.; Frank, M.; Rheinberger, V.: A Comparison of the Microstructure and Properties of the IPS Empress®2 and the IPS Empress® Glass-Ceramics, 297
Holland, K. M. See Andriano, K. P., 36
Holloway, J. A. See Denry, I. L., 289
Honl, M.
—; Rentzsch, R.; Müller, G.; Brandt, C.; Bluhm, A.; Hille, E.; Louis, H.; Morlock, M.: The Use of Water-Jetting Technology in Prostheses Revision Surgery—First Results of Parameter Studies on Bone and Bone Cement, 781
Hu, C.-z. See Zamora, P. O., 244
Huffer, W. E. See Andriano, K. P., 36
Huiskes, R. See Verdonschot, N., 498
Hutter, J. C. See Lucas, A. D., 449
—; See Luu, H.-M. D., 276
Hwang, D.-S. See Shanbhag, A. S., 100

Ikada, Y. See Itoh, E., 640
Ingham, E. See Green, T. R., 490
Ito, N. See Baltag, I., 76
Itoh, E.
—; Matsuda, S.; Yamauchi, K.; Oka, T.; Iwata, H.; Yamaoka, Y.; Ikada, Y.: Synthetic Absorbable Film for Prevention of Air Leaks After Stapled Pulmonary Resection, 640
Iwaki, H. See Oonishi, H., 174
Iwata, H. See Itoh, E., 640

Jacobs, J. J. See Hallab, N. J., 480
Jansen, J. A. See Gerritsen, M., 702
Jessup, G. See Griesser, H. J., 235
Jevnikar, P. See Kosmač, T., 304
Jiang, G. See Shi, D., 457
Johnson, A. See Klueh, U., 621
Johnston, J. B.
—; A Simple, Nondestructive Assay for Bound Hyaluronan, 188

Kadoya, Y. See Oonishi, H., 174
Kalson, J. A. See Lucas, A. D., 449
Kambic, H. See Valdevit, A., 62

Kambic, H. E. See Mochida, Y., 193
Kamimura, M. See Shinzato, S., 51
Karlsson, S. See Aronsson, G., 651
Kato, H.
—; Nakamura, T.; Nishiguchi, S.; Matsusue, Y.; Kobayashi, M.; Miyazaki, T.; Kim, H.-M.; Kokubo, T.: Bonding of Alkali- and Heat-Treated Tantalum Implants to Bone, 28
Katona, T. R. See Winkler, M. M., 554
Kawagoe, K.
—; Saito, M.; Shibuya, T.; Nakashima, T.; Hino, K.; Yoshikawa, H.: Augmentation of Cancellous Screw Fixation with Hydroxyapatite Composite Resin (CAP) *In Vivo*, 678
Keating, J. See Benevenia, J., 67
Kelly, S. See Klueh, U., 621
Khor, E. See Loke, W.-K., 8
Kienapfel, H. See Roessler, M., 167
Kim, D.-J.
—; Lee, M.-H.; Lee, D.-Y.; Han, J.-S.: A Comparison of Mechanical Properties of All-Ceramic Alumina Dental Crowns Prepared from Aqueous- and Non-Aqueous-Based Tape Casting, 314
—; Lee, M.-H.; Lee, D. Y.; Han, J.-S.: Mechanical Properties, Phase Stability, and Biocompatibility of (Y,Nb)-TZP/Al_2O_3 Composite Abutments for Dental Implant, 438
Kim, H.-M. See Kato, H., 28
Kim, S.-h.
—; Chu, C.-C.: Pore Structure Analysis of Swollen Dextran-Methacrylate Hydrogels by SEM and Mercury Intrusion Porosimetry, 258
Kin, N. See Oonishi, H., 174
Klapperich, C.
—; Niedzwiecki, S.; Ries, M.; Pruitt, L.: Fluid Sorption of Orthopedic Grade Ultrahigh Molecular Weight Polyethylene in a Serum Environment Is Affected by the Surface Area and Sterilization Method, 73
Klueh, U.
—; Wagner, V.; Kelly, S.; Johnson, A.; Bryers, J. D.: Efficacy of Silver-Coated Fabric to Prevent Bacterial Colonization and Subsequent Device-Based Biofilm Formation, 621
Kobayashi, M. See Baltag, I., 76
—; See Kato, H., 28
—; See Shinzato, S., 51
Kokubo, T. See Kato, H., 28
—; See Shinzato, S., 51
Kosmač, T.
—; Oblak, Č.; Jevnikar, P.; Funduk, N.; Marion, L.: Strength and Reliability of Surface Treated Y-TZP Dental Ceramics, 304
Krauser, J. T. See Mukherjee, D. P., 467
Kuan, H. M. See Zamora, P. O., 244
Kunzelmann, K.-H. See Manhart, J., 353
Kusakari, H. See Baltag, I., 76

Laippala, P. J. See Peltola, M. J., 161
Lau, S.-K. See Loke, W.-K., 8
Lauer, H.-C. See Weigl, P., 320, 337
Lautenschlager, E. P. See Park, S., 568
Lee, D.-Y. See Kim, D.-J., 314, 438
Lee, M.-H. See Kim, D.-J., 314, 438
Leforestier, E. See Bertrand, M.-F., 658
Lemaître, J. See Pittet, C., 769
Lewis, G.
—; Relative Roles of Cement Molecular Weight and Mixing Method on the Fatigue Performance of Acrylic Bone Cement: Simplex®P Versus Osteopal®, 119
—; Nyman, J. S.: Toward Standardization of Methods of Determination of Fracture Properties of Acrylic Bone Cement and Statistical Analysis of Test Results, 748
Leyhausen, G. See Theilig, C., 632
Li, X. S. See Campbell, A. A., 400
Lilli, C. See Locci, P., 560
Lin, C.-W. See Lin, J.-C., 799
Lin, J.-C.
—; Lin, C.-W.; Lin, X.-Z.: *In Vitro* and *In Vivo* Studies for Modified Ethyl Cyanoacrylate Regimens for Sclerotherapy, 799
Lin, X.-Z. See Lin, J.-C., 799
Locci, P.
—; Lilli, C.; Marinucci, L.; Calvitti, M.; Belcastro, S.; Bellocchio, S.; Staffolani, N.; Guerra, M.; Becchetti, E.: *In Vitro* Cytotoxic Effects of Orthodontic Appliances, 560
Loke, W.-K.
—; Lau, S.-K.; Yong, L. L.; Khor, E.; Sum, C. K.: Wound Dressing with Sustained Anti-Microbial Capability, 8
Louis, H. See Honl, M., 781
Lu, X.
—; Topoleski, L. D. T.: A Controlled-Notch Specimen to Study Fatigue Crack Initiation in Bone Cement, 505
Lucas, A. D.
—; Kalson, J. A.; Hutter, J. C.; Wallis, R. R.: Identifying Toxic Degradation Products in Cellulose Acetate Dialyzers, 449
Lupi-Pégurier, L. See Bertrand, M.-F., 658
Lutterman, J. A. See Gerritsen, M., 702
Luu, H.-M. D.
—; Hutter, J. C.: Pharmacokinetic Modeling of 4,4′-Methylenedianiline Released from Reused Polyurethane Dialyzer Potting Materials, 276

Määttänen, H. S. See Peltola, M. J., 161
Mäder, W. See Bolliger-Stucki, B., 577
Manhart, J.
—; Kunzelmann, K.-H.; Chen, H. Y.; Hickel, R.: Mechanical Properties of New Composite Restorative Materials, 353
Marinucci, L. See Locci, P., 560
Marion, L. See Kosmač, T., 304
Marquis, P. M. See Rimell, J. T., 414
Martin, C. See Griesser, H. J., 235
Martini, D. See Guizzardi, S., 227
Massè, A.
—; Bruno, A.; Bosetti, M.; Biasibetti, A.; Cannas, M.; Gallinaro, P.: Prevention of Pin Track Infection in External Fixation with Silver Coated Pins: Clinical and Microbiological Results, 600
Mathes, S. See Gruber, A. D., 445
Matsuda, S. See Itoh, E., 640
Matsuda, T. See Nakayama, Y., 584
Matsusue, Y. See Kato, H., 28
Matthews, J. B. See Green, T. R., 490
Mayor, M. B. See Currier, B. H., 143
McCain, M. L. See Arola, D. D., 536
McEnery, K. See Andriano, K. P., 36
McKoy, B. E.
—; An, Y. H.: An Injectable Cementing Screw for Fixation in Osteoporotic Bone, 216
Merritt, K.
—; Hitchins, V. M.; Brown, S. A.: Safety and Cleaning of Medical Materials and Devices, 131
Merte, K.
—; Fröhlich, M.; Häfer, M.; Hirsch, E.; Schneider, H.; Winkler, M.: Two-Year Clinical Performance of Two Primer Adhesives on Class V Restorations, 93
—; See Schneider, H., 86
Migliaccio, S. See Guizzardi, S., 227
Mikecz, K. See Hallab, N. J., 480
Milanese, D. See Verné, E., 408
Mills, D. K. See Mukherjee, D. P., 467
Miyakawa, O. See Baltag, I., 76
Miyazaki, T. See Kato, H., 28
Mochida, Y.
—; Bauer, T. W.; Nitto, H.; Kambic, H. E.; Muschler, G. F.: Influence of Stability and Mechanical Properties of a Spinal Fixation Device on Production of Wear Debris Particles *In Vivo*, 193
Momose, T.
—; Amadio, P. C.; Zhao, C.; Zobitz, M. E.; An, K.-N.: The Effect of Knot Location, Suture Material, and Suture Size on the Gliding Resistance of Flexor Tendons, 806
Montanari, C. See Guizzardi, S., 227
Morlock, M. See Honl, M., 781
Morvan, F. See Abboud, M., 728
Motlagh, D. See Deutsch, J., 267
Mousa, W. F. See Shinzato, S., 51
Moyer, K. See Andriano, K. P., 36

Mukherjee, D. P.
—; Dorairaj, N. R.; Mills, D. K.; Graham, D.; Krauser, J. T.: Fatigue Properties of Hydroxyapatite-Coated Dental Implants after Exposure to a Periodontal Pathogen, 467
Mukherjee, N.
—; Roseman, R. D.; Willging, J. P.: The Piezoelectric Cochlear Implant: Concept, Feasibility, Challenges, and Issues, 181
Müller, G. See Honl, M., 781
Muller, M. See Bertrand, M.-F., 658
Muschler, G. F. See Mochida, Y., 193

Nakamura, T. See Kato, H., 28
—; See Shinzato, S., 51
Nakashima, T. See Kawagoe, K., 678
Nakayama, Y.
—; Anderson, J. M.; Matsuda, T.: Laboratory-Scale Mass Production of a Multi-Micropatterned Grafted Surface with Different Polymer Regions, 584
—; See Shirai, K., 204
Nam, Y. S.
—; Yoon, J. J.; Park, T. G.: A Novel Fabrication Method of Macroporous Biodegradable Polymer Scaffolds Using Gas Foaming Salt as a Porogen Additive, 1
Nelson, B. J. See Campbell, A. A., 400
Neo, M. See Shinzato, S., 51
Niedzwiecki, S. See Klapperich, C., 73
Nishiguchi, S. See Kato, H., 28
Nitto, H. See Mochida, Y., 193
Nyman, J. S. See Lewis, G., 748

Oblak, Č. See Kosmač, T., 304
Oka, T. See Itoh, E., 640
Okazaki, M. See Shirai, K., 204
Oonishi, H.
—; Kadoya, Y.; Iwaki, H.; Kin, N.: Hydroxyapatite Granules Interposed at Bone-Cement Interface in Total Hip Replacements: Histological Study of Retrieved Specimens, 174
Osaki, S. See Zamora, P. O., 244
Oster, Z. H. See Zamora, P. O., 244

Park, J. B. See Case, J. A., 791
—; See Park, K. D., 737
Park, K. D.
—; Park, J. B.: Interfacial Strength of Compression-Molded Specimens Between PMMA Powder and PMMA/MMA Monomer Solution-Treated Ultra-High Molecular Weight Polyethylene (UHMWPE) Powder, 737
Park, S.
—; Bearinger, J. P.; Lautenschlager, E. P.; Castner, D. G.; Healy, K. E.: Surface Modification of Poly(ethylene terephthalate) Angioplasty Balloons with a Hydrophilic Poly(acrylamide-*co*-ethylene glycol) Interpenetrating Polymer Network Coating, 568
Park, T. G. See Nam, Y. S., 1
Parks, N. L. See Que, L., 111
Parry, E. See Chow, L. C., 511
Parsons, J. R. See Benevenia, J., 67
Peltola, M. J.
—; Suonpää, J. T. K.; Andersson, Ö. H.; Määttänen, H. S.; Aitasalo, K. M. J.; Yli-Urpo, A.; Laippala, P. J.: *In Vitro* Model for Frontal Sinus Obliteration with Bioactive Glass S53P4, 161
Persselin, S. See Szivek, J. A., 211
Pini, M. See Scherrer, S. S., 362
Pittet, C.
—; Lemaître, J.: Mechanical Characterization of Brushite Cements: A Mohr Circles' Approach, 769
Plouhar, P. See Goodman, S., 475
Pototschnig, C. See Sittel, C., 646
Powers, N. See Prior, J. J., 252
Prior, J. J.
—; Powers, N.; DeLustro, F.: Efficacy of a Novel Hemostatic Agent in Animal Models of Impaired Hemostasis, 252
Pruitt, L. See Klapperich, C., 73

Qian, H. See Winkler, M. M., 554
Que, L.
—; Topoleski, L. D. T.; Parks, N. L.: Surface Roughness of Retrieved CoCrMo Alloy Femoral Components from PCA Artificial Total Knee Joints, 111

Regula, D. See Goodman, S., 475
Rekow, E. D.
—; Thompson, V. P.: Dental Biomaterials: Editorial Comment, 287
Rentzsch, R. See Honl, M., 781
Rheinberger, V. See Höland, W., 297
Ries, M. See Klapperich, C., 73
Rimell, J. T.
—; Marquis, P. M.: Selective Laser Sintering of Ultra High Molecular Weight Polyethylene for Clinical Applications, 414
Rivard, C.-H. See Chellat, F., 592
Rivera, E. See Coreño, J., 44
Rodríguez, R. See Coreño, J., 44
Roessler, M.
—; Wilke, A.; Griss, P.; Kienapfel, H.: Missing Osteoconductive Effect of a Resorbable PEO/PBT Copolymer in Human Bone Defects: A Clinically Relevant Pilot Study with Contrary Results to Previous Animal Studies, 167
Roseman, R. D. See Mukherjee, N., 181
Rubash, H. E. See Shanbhag, A. S., 100
Ruggeri, A. See Guizzardi, S., 227
Russell, B. See Deutsch, J., 267

Sachs, E. See Curodeau, A., 525
Saito, M. See Kawagoe, K., 678
Sarkar, N. K.
—; Internal Corrosion in Dental Composite Wear: Its Significance and Simulation, 371
Scherrer, S. S.
—; Botsis, J.; Studer, M.; Pini, M.; Wiskott, H. W. A.; Belser, U. C.: Fracture Toughness of Aged Dental Composites in Combined Mode I and Mode II Loading, 362
Schlegel, K. A.
—; Sindet-Pedersen, S.; Hoepffner, H.-J.: Clinical and Histological Findings in Guided Bone Regeneration (GBR) Around Titanium Dental Implants with Autogeneous Bone Chips Using a New Resorbable Membrane, 392
Schmidt, C.
—; Weigl, P.: Machinability of IPS Empress® 2 Framework Ceramic: Potential for Ceramic Dentures, 348
Schneider, H.
—; Fröhlich, M.; Erler, G.; Engelke, C.; Merte, K.: Interaction Patterns Between Dentin and Adhesive on Prepared Class V Cavities *In Vitro* and *In Vivo*, 86
—; See Merte, K., 93
Schroeder, D. See Duda, G. N., 673
Schumacher, G. E. See Skrtic, D., 381
Schweiger, M. See Höland, W., 297
Shanbhag, A. S.
—; Bailey, H. O.; Hwang, D.-S.; Cha, C. W.; Eror, N. G.; Rubash, H. E.: Quantitative Analysis of Ultrahigh Molecular Weight Polyethylene (UHMWPE) Wear Debris Associated with Total Knee Replacements, 100
Shea, J. E. See Willie, B. M., 137
Shi, D.
—; Jiang, G.; Wen, X.: *In Vitro* Bioactive Behavior of Hydroxylapatite-Coated Porous Al_2O_3, 457
Shibuya, T. See Kawagoe, K., 678
Shintani, H. See Shirai, K., 204
Shinzato, S.
—; Kobayashi, M.; Mousa, W. F.; Kamimura, M.; Neo, M.; Choju, K.; Kokubo, T.; Nakamura, T.: Bioactive Bone Cement: Effect of Surface Curing Properties on Bone-Bonding Strength, 51
Shirai, K.
—; Yoshida, Y.; Nakayama, Y.; Fujitani, M.; Shintani, H.; Wakasa, K.; Okazaki, M.; Snauwaert, J.; Van Meerbeek, B.: Assessment of Decontamination Methods as Pretreatment of Silanization of Composite Glass Fillers, 204
Siemionow, M. See Valdevit, A., 62
Sindet-Pedersen, S. See Schlegel, K. A., 392
Singletary, S. See Zamora, P. O., 244

Sittel, C.
—; Thumfart, W. F.; Pototschnig, C.; Wittekindt, C.; Eckel, H. E.: Textured Polydimethylsiloxane Elastomers in the Human Larynx: Safety and Efficiency of Use, 646
Sittinger, M. See Duda, G. N., 673
Skrtic, D.
—; Antonucci, J. M.; Eanes, E. D.; Eichmiller, F. C.; Schumacher, G. E.: Physicochemical Evaluation of Bioactive Polymeric Composites Based on Hybrid Amorphous Calcium Phosphates, 381
Smith, R. L. See Goodman, S., 475
Smith, S. L.
—; Ash, H. E.; Unsworth, A.: A Tribological Study of UHMWPE Acetabular Cups and Polyurethane Compliant Layer Acetabular Cups, 710
Snauwaert, J. See Shirai, K., 204
Solmi, R. See Guizzardi, S., 227
Som, P. See Zamora, P. O., 244
Song, L. See Campbell, A. A., 400
Song, Y. See Goodman, S., 475
Staffolani, N. See Locci, P., 560
Stern, R. A. See Zamora, P. O., 244
Stone, M. H. See Green, T. R., 490
Strocchi, R. See Guizzardi, S., 227
Studer, M. See Scherrer, S. S., 362
Sum, C. K. See Loke, W.-K., 8
Suonpää, J. T. K. See Peltola, M. J., 161
Szivek, J. A.
—; Battraw, A. G.; Persselin, S.; Anderson, P. L.: A Comparison of *In Vitro* and *In Vivo* Degradation of Two CPC Strain Gauge Coatings, 211

Tabrizian, M. See Chellat, F., 592
Taguchi, N. See Baltag, I., 76
Takagi, S. See Chow, L. C., 511
Tan, K. B. See Yap, A. U. J., 547
Tegtmeier, Y. See Theilig, C., 632
Teoh, S. H. See Yap, A. U. J., 547
Theilig, C.
—; Tegtmeier, Y.; Leyhausen, G.; Geurtsen, W.: Effects of BisGMA and TEGDMA on Proliferation, Migration, and Tenascin Expression of Human Fibroblasts and Keratinocytes, 632
Thompson, V. P. See Rekow, E. D., 287
Thumfart, W. F. See Sittel, C., 646
Toda, T. See Yoshikawa, M., 430
Toni, A. See Affatato, S., 221
Topoleski, L. D. T. See Lu, X., 505
—; See Que, L., 111
Tsang, R. See Zamora, P. O., 244
Tucker, R. D. See Case, J. A., 791
Türegün, M. See Valdevit, A., 62

Unsworth, A. See Smith, S. L., 710

Valdevit, A.
—; Türegün, M.; Kambic, H.; Siemionow, M.; Zins, J.: Cranial Defect Repair Using e-PTFE: Part I. Evaluation of Bone Stiffness, 62
Vallo, C. I.
—; Influence of Filler Content on Static Properties of Glass-Reinforced Bone Cement, 717
van Luyn, M. J. A. See van Wachem, P. B., 18
Van Meerbeek, B. See Shirai, K., 204
van Wachem, P. B.
—; Brouwer, L. A.; Zeeman, R.; Dijkstra, P. J.; Feijen, J.; Hendriks, M.; Cahalan, P. T.; van Luyn, M. J. A.: *In Vivo* Behavior of Epoxy-Crosslinked Porcine Heart Valve Cusps and Walls, 18
Vasic, Z. R. See Griesser, H. J., 235
Verdonschot, N.
—; Huiskes, R.: Creep Properties of Three Low Temperature-Curing Bone Cements: A Preclinical Assessment, 498
Verné, E.
—; Brovarone, C. V.; Milanese, D.: Glass-Matrix Biocomposites: Synthesis and Characterization, 408

Waddell, J. P. See Al Hertani, W., 518
Wagner, V. See Klueh, U., 621
Wakasa, K. See Shirai, K., 204
Wallis, R. R. See Lucas, A. D., 449
Wang, R. See Yarovoy, Y. K., 152
Wang, X.
—; Agrawal, C. M.: A Mixed Mode Fracture Toughness Test of Bone–Biomaterial Interfaces, 664
Watanabe, K. See Baltag, I., 76
Weigl, P.
—; Hahn, L.; Lauer, H.-C.: Advanced Biomaterials Used for a New Telescopic Retainer for Removable Dentures: Ceramic vs. Electroplated Gold Copings: Part I. *In Vitro* Tribology Effects, 320
—; Lauer, H.-C.: Advanced Biomaterials Used for a New Telescopic Retainer for Removable Dentures: Ceramic vs. Electroplated Gold Copings: Part II. Clinical Effects, 337
—; See Schmidt, C., 348
Wen, X. See Shi, D., 457
Widenhouse, C. W. See Gruber, A. D., 445
Wilke, A. See Roessler, M., 167
Willging, J. P. See Mukherjee, N., 181
Willie, B. M.
—; Shea, J. E.; Bloebaum, R. D.; Hofmann, A. A.: Elemental and Morphological Identification of Third-Body Particulate and Calcium Stearate Inclusions in Polyethylene Components, 137
Winkler, M. See Merte, K., 93
Winkler, M. M.
—; Chen, J.; Qian, H.; Hamula, D. W.; Carlson, T. J.; Katona, T. R.: Experimental Validation of a Finite Element Model of Light-Activated Polymerization Shrinkage, 554
Wiskott, H. W. A. See Scherrer, S. S., 362
Wittekindt, C. See Sittel, C., 646
Wunder, S. L. See Yarovoy, Y. K., 152

Yahia, L. See Chellat, F., 592
Yamaoka, Y. See Itoh, E., 640
Yamauchi, K. See Itoh, E., 640
Yap, A. U. J.
—; Teoh, S. H.; Tan, K. B.: Influence of Water Exposure on Three-Body Wear of Composite Restoratives, 547
Yarovoy, Y. K.
—; Baran, G.; Wunder, S. L.; Wang, R.: Submicron-Size Particles of Ultrahigh Molecular Weight Polyethylene Produced via Nonsolvent and Temperature-Induced Crystallization, 152
Yli-Urpo, A. See Peltola, M. J., 161
Yong, L. L. See Loke, W.-K., 8
Yoon, J. J. See Nam, Y. S., 1
Yoshida, Y. See Shirai, K., 204
Yoshikawa, H. See Kawagoe, K., 678
Yoshikawa, M.
—; Toda, T.: Reconstruction of Alveolar Bone Defect by Calcium Phosphate Compounds, 430

Zamora, P. O.
—; Osaki, S.; Som, P.; Ferretti, J. A.; Choi, J. S.; Hu, C.-z.; Tsang, R.; Kuan, H. M.; Singletary, S.; Stern, R. A.; Oster, Z. H.: Radiolabeling Brachytherapy Sources with Re-188 Through Chelating Microfilms: Stents, 244
Zeeman, R. See van Wachem, P. B., 18
Zhao, C. See Momose, T., 806
Zhong, J.
—; Greenspan, D. C.: Processing and Properties of Sol–Gel Bioactive Glasses, 694
Zimmerman, M. See Benevenia, J., 67
Zins, J. See Valdevit, A., 62
Zobitz, M. E. See Momose, T., 806

Journal of Biomedical Materials Research (Applied Biomaterials) Subject Index to Volume 53

Abrasion, 547
Abrasive waterjet, 536
Acetabular cups, 710
Acrylic bone cement, 119, 605, 717, 728, 748
Advanced Technology Program, 617
Aesthetics, 297
Aging, 304
Alkali treatment, 28
Alkaline medium, 371
Alkaline phosphatase, 227
All-ceramic dental crown, 314
Allografts, 67
Alumina/glass composite, 314
Ammonium carbonate, 1
Amorphous calcium phosphate, 381
Animal model, 475
Anticoagulation, 252
Antimicrobial, 400
Apatite, 28
Apatite-, and wollastonite-containing glass-ceramic, 51
Arthroplasty, 518
Augmentation, 646

Backscattered electron imaging, 137
Bacterial adhesion, 621
Bactericidal fabric, 621
Bauer–Kirby Disk Diffusion Test, 8
Bioactive cement, 678
Bioactive glass, 161, 199, 694
Bioactive implant, 457
Bioactivity, 408
Biochemical properties, 577
Biocompatibility, 438
Biocomposites, 408, 421
Biodegradable polymers, 1, 36
Biodegradation, 592
Biomolecules, 617
Bioplastique, 646
BisGMA, 632
Bisphenol-*a*-glycidyl methacrylate, 51
Bone, 211, 664
Bone bonding, 28
Bone cement, 505, 781
Bone chips, 392
Bone defect, 167
Bone ingrowth, 167, 475
Bone morphogenetic protein, 36
Bone reconstruction, 430
Bone regeneration, 36
Bone resorption, 490
Bone-anchorage, 702
Bone-bonding strength, 51
Brachytherapy, 244
Brazilian disk test, 362
Brazilian test, 769

Caffeine, 799
Calcification, 18
Calcium ions, 44
Calcium phosphate cement, 511, 769
Calcium-phosphate coating, 702
Calorimetry, 791
Canine, 518
Canine model, 67
Cardiac myocytes, 267
Cardiovascular sutures, 235
Cartilage mechanics, 673
Cast orthopedic implant, 525
Cell proliferation, 560, 651
Cells, 617
Cellular attachment, 267
Cellulose acetate, 449
Cement, 216
Cemented arthroplasties, 605
Ceramic ball head, 221
Ceramics, 320, 337
Chelate, 244
Chitin-chitosan based dual-layer wound dressing, 8
Chitosan–xanthan, 592
Chlorhexidine, 400
Chlorhexidine gluconate, 8
Class V lesions, 93
Clinical trial, 93
Coating, 600
Coating stability, 467
Coatings, 408, 457
Cochlear implant, 181
CoCrMo alloy, 111
Collagen, 252
Composite resin, 658
Composite resins, 362
Composites, 381, 547
Compression-molding, 737
Compressive strength, 511
Condensable composites, 353
Conjunctivitis, 449
Cranial defect repair, 62
Crosslinking, 18
Cyanoacrylate, 799

Decontamination, 204
Degradation, 449
Dental, 547
Dental abutment, 438
Dental bridge, 297
Dental ceramic, 348
Dental composite filler, 204
Dental composite resins, 651
Dental grinding, 304
Dental implants, 392, 438, 467
Dental resin, 554
Dental resin composites, 371
Dental restoration, 297
Dental retainer, 320, 337
Dental stress analysis, 554
Dentin bonding agents, 86
Dentistry, 658
Design and fabrication process, 525
Dextran-methacrylate hydrogel, 258
Diabetes mellitus, 702
Dialyzers, 449
Diametral tensile strength, 511
Diamond-Like Carbon, 221
Diffusion, 737
Dissolution, 161
3D printing, 525
Dry heat treatment, 577
DSC, 152
Ductile behavior, 348

Elastomeric sutures, 235
Electron probe microanalysis, 76
Electroplated gold, 320, 337
Emulsion, 152
Endothelial cell, 584
Energy dispersive X-ray analysis, 137
Epoxy, 18
Ethanol aging, 362
Ethylene oxide gas, 119
Expanded-polytetrafluoroethylene (e-PTFE), 62
External fixation, 600
External fixation pin, 400

Factor XIII, 577
Fatigue, 119, 536, 605, 748
Fatigue crack initiation, 505
Fatigue crack propagation, 748
Fatigue failure, 505
Fatigue properties, 467
Feasibility, 181
Fibers, 199
Fibrin glue, 577
Fibrinogen, 577
Fibrin-sealant, 252
Fibroblasts, 632
Fillings, 93
Finite element, 554
Finite element analysis, 664
Fixation, 67
Fixation device, 193
Flexor tendon, 806
Flocculated silica particles, 44
Foreign-body giant cells, 430
Fracture, 605
Fracture fixation, 678
Fracture toughness, 664, 748
Friction, 235, 806
FTIR, 76

GAG, 560
Gamma irradiation, 119
Gamma radiation sterilization, 36
Glass-ceramics, 297
Glasses, 408
Glaze, 658
Gliding resistance, 806
Glottic gap, 646
Glow discharge coatings, 235
Graft polymerization, 568
Grinding, 348
Growth factor, 475

Heart valve, 18
Hemodialysis, 449
Hemodialyzer, 276
Hemostasis, 252
Hiatus, 86
Hip, 710
Hip replacement, 490, 498
Hip simulator, 221
Histology, 174
Holding power, 216
Hot pressing, 421
HPLC, 592
Human, 646
Human gingival fibroblasts, 560
Humidity drying, 694
Hyaline-like cartilage, 673
Hyaluronan assay, 188
Hydrogels, 568, 592
Hydroxyapatite, 44, 51, 76, 174, 211, 227, 400, 421, 518, 678
Hydroxyapatite coating, 467, 685
Hydroxylapatite, 457
Hypersensitivity, 480

Image analysis, 258
Impaired wound healing, 702
Implant, 664
Implant analysis, 137
In vitro model, 161
In vivo evaluation, 86
In vivo study, 678
Incubation, 685
Infection, 8, 600
Iniferter, 584
Initiators, 651
Injectable screw, 216
Interaction patterns, 86
Interface, 664
Interfacial tensile strength, 737
Internal corrosion, 371
Interpenetrating polymer network, 568
Interstitial temperature, 791
IPS Empress® 2 framework ceramic, 348

Jet cutting, 781
Joint arthroplasty, 505
Joint replacement, 475

Keratinocytes, 632
Knee prosthesis, 111
Knot, 806

Larynyngoplasty, 646
Lipiodol®, 799

Machining, 348
Madreporic surface, 518
Mann–Whitney U test, 748
Mass production, 584
Material properties, 673
Mechanical properties, 353, 438, 717
Mechanical strength, 381
Mechanical testing, 62, 605, 769
Medialization, 646
Mercury intrusion porosimetry, 258
Metal ions, 560
Metallic ball head, 221
Metals, 480
4,4′-Methylenedianiline, 276
Micro Raman spectroscopy, 44
Microencapsulation, 728
Microfabrication, 267
Microhardness, 658
Micropattern, 584
Microspheres, 592
Microstructure, 297, 421, 685
Migration, 632
Migration assay, 480
Mixed-mode toughness, 362
Mohr circles, 769
Mononuclear cells, 651
Morphology, 258

Nanoleakage, 86
Natural apatite, 227
Novafil®, 235

Ormocers, 353
Orthodontic appliances, 560
Orthopedic, 400
Osteoblasts, 227
Osteoconductive material, 167
Osteoconductivity, 430
Osteolysis, 137
Osteoporosis, 216

Particle-reinforced composite bone cements, 717
Particulate glass filler, 717
PBPK model, 276
Percutaneous device, 702
Periodontal pathogen, 467
Periosteal cells, 227
Periprosthetic bone quality, 518
Phase changes, 685
Photopolymerization, 584
Piezoelectric, 181
PMMA, 781
PMMA powder, 737
PMMA/MMA solution-treated UHMWPE powder, 737
POLYACTIVE®, 167
Polyalkenoate salts, 421
Polybutester, 235
Polyethylene, 137, 152
Polyethylene fabrication method, 143
Polyethylene mechanical properties, 143
Polyethylene oxidation, 143
Polyethylene resin, 143
Poly(ethylene terephthalate), 568
Polyethylene wear, 221
Poly(L-lactic acid), 1
Polymerization modifier, 799
Polymerization shrinkage, 554
Polymethylmethacrylate, 174, 216
Polyurethane, 276, 710
Pore structure, 258
Porous surface texture, 525
Power output, 791
Precracking, 362

Prevention of air leaks, 640
Primer adhesives, 93
Proliferation assay, 480
Properties, 297
Prostheses, 536
Prosthesis, 18, 414, 781

Rabbit model, 62
Radiolabeling, 244
Radiopaque alumina powder, 728
Rapid prototyping, 525
Recurrent nerve palsy, 646
Region of interest technique, 161
Remineralization, 381
Residual monomer, 717
Residual stress, 536
Resin composite, 93, 204, 554
Resorbability, 694
Resorbable polymer, 167
Retrieval and characterization, 100
Retrieval study, 111
Retrieved blade implant, 76
Reuse, 276
Rhenium-188, 244

Sandblasting, 304
Scaffolds, 1
Scanning electron microscopy, 258
Sclerosant, 799
Screw fixation, 216
Sealant, 658
Self-regulating rods, 791
SEM, 152
Serum sorption, 73
Shelf aging, 143
Silazanes, 235
Silicone, 267
Silicone elastomers, 445
Silicone leaching, 445
Silicone therapeutic use, 646
Siloxanes, 235
Silver, 600
Silver-coated fabric, 621
Simulated body fluid, 44, 685
Simulated physiological media, 592
Simulator, 710
Sintering, 408, 414
Sinus obliteration, 161
SLS, 414
Sodium peroxodisulfate, 204
Sol–gel, Bioglass®, 694
Soxhlet extraction, 445
Spinal fusion, 193
Stabilizers, 651
Stapled pulmonary resection, 640
Staple-line reinforcement buttress, 640
Stents, 244
Sterilization, 73
Stick-slip behavior, 235
Stiffness, 62
Strain gauge, 211
Strength, 314
Stress concentration, 505
Submicrometer particles, 152
Subsurface damage, 371
Surface diffusion, 73
Surface-induced mineralization, 400
Surface modification, 568
Surface property, 51
Surface roughness, 111
Surface strengthening, 304
Surface texture, 658
Suspension polymerization, 728
Synthetic absorbable film, 640

Tantalum, 28
Tape casting, 314
TEGDMA, 632
Tenascin, 632
Tendon repair, 806
Tensile strength, 199, 769
Tensile testing, 28
Test standard, 673
Tetracalcium phosphate, 430
Tetragonal zirconia, 304
Thermal ablation, 791
Third-body particulate, 137
Three-body wear, 547
Thrombin, 252
Tibia, 67
Tissue engineering, 1, 199, 617
Tissue engineering process, 673
Tissue response, 702
Titanium, 536
Titanium dental implants, 392
TNF-α, 490
Toluidine blue, 188
Total hip replacement, 174
Total joint arthroplasty, 480
Total knee replacement, 100
Toughness, 314
Tribology, 320, 337, 710
Tricalcium phosphate, 211, 430
3-(Trimethoxysilyl)propyl-methacrylate or γMPS, 728

UHMWPE, 73
UHMWPE, 100, 414, 490, 710

Vickers hardness, 353
Voice disorder therapy, 646

Water, 547
Water jet, 781
Wear, 73, 111, 137, 320, 337, 353, 371
Wear debris, 100, 490
Wear particles, 193
Wounds, 8

X-ray diffraction, 76
X-ray photoelectron spectroscopy, 204

Zirconia/alumina composite, 438